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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/587,451

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EXAMINER

ZOLLINGER, NATHAN C

ART UNIT

PAPER NUMBER

4117

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,451	Applicant(s) AMANO, RYUICHIRO	
	Examiner NATHAN ZOLLINGER	Art Unit 4117	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060727 and 20070924</u> . | 6) <input type="checkbox"/> Other: ____. |

Specification

The disclosure is objected to because of the following informalities: several grammatical mistakes. For example, on page 7, the phrase "remaining a smaller space in the recess" should be rewritten as "a recess which remains after crushing."

Appropriate correction is required.

The use of the trademark Vaseline on page 21 has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchibori et al. (US 5,666,015) in view of Kost (US 2,321,755) and in further view of Neill (US 3,505,923).

Referring to claim 1: Uchibori et al. disclose a compressor, comprising a closed container (1) a compressor element section (3) housed in a lower portion of the closed container, and an electric motor element section (2) housed in an upper portion of the

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closed container, and including a rotor (5) a stator (4) disposed on an outer periphery of the rotor, an end plate (30) provided on an end surface of the rotor, and an oil separation plate (26) installed on the end plate and forming a through hole (Fig. 1, end regions of 26), the end plate including a main section (30), and a projection (31) projecting from the main section and fitted in the through hole, the projection including a projected part projected from the through hole of the oil separation plate. Uchibori et al. does not disclose that the projection is crushed to integrate the oil separation plate (26) with the end plate (30). However, Kost teaches such a feature. In discussing the connecting means for sheet metal panels, Kost teaches that an integrally formed boss can be inserted into an aperture of another panel and then flattened to create a connection (col. 1, lines 5-19). This fastening arrangement simplifies the fastening process (col. 1, lines 5-8). Therefore, a person having ordinary skill in the art, at the time of the invention, could modify the boss connections disclosed by Uchibori et al. to be flattened to secure the oil plate and simplify the process of attaching the oil plate to the end plate. Additionally, Uchibori et al. and Kost do not disclose that there is a recess on an upper face of the projection. However, Neill teaches such a disclosure. In discussing rivet fasteners, Neill teaches to include a recess with a conical surface on the head of the rivet (col. 3, lines 17-19, 27). The recess acts to cause a uniform flow of material throughout the rivet, improving the strength of the rivet (col. 3, lines 48-63). Therefore, a person having ordinary skill in the art, at the time of the invention, could modify the projection disclosed by Uchibori et al. and modified by Kost to include a conical recess at the head portion in order to increase the strength of the projection.

Referring to claim 2: Uchibori et al., Kost and Neill disclose the limitations of claim 1, discussed previously. Additionally, Uchibori et al. and Kost also do not disclose a compressor wherein the projection is partly crushed to remain a portion of the recess. However, Neill teaches such a feature. In discussing the fastening of a rivet with a recess Neill teaches that utilizing a recess prevents the head portion from being at an undue thickness near the collar section (col. 3, lines 49-51). This recess, maintained even after the pressing of the rivet, ensures that a uniform flow of material exists throughout the fastener, which improves the overall strength of the rivet (col. 3, lines 49-57). Therefore, a person having ordinary skill in the art could modify the projection disclosed by Uchibori et al. and modified by Kost to maintain a recess after pressing at the head portion in order to maintain the strength of the projection.

Referring to claim 3: Uchibori et al., Kost and Neill disclose the limitations of claim 1, discussed previously. Uchibori et al. and Kost do not disclose a compressor wherein the recess on the projection has a cone shape with a diameter that gradually decreases downward. However, Neill teaches such a disclosure. In discussing rivet fasteners, Neill teaches to include a recess with a conical surface on the head of the rivet (col. 3, lines 17-19, 27). The recess acts to cause a uniform flow of material throughout the rivet, improving the strength of the rivet (col. 3, lines 48-63). Therefore, a person having ordinary skill in the art could modify the projection disclosed by Uchibori et al. and modified by Kost to include a conical recess at the head portion in order to increase the strength of the projection.

Referring to claim 4: Uchibori et al., Kost and Neill disclose the limitations of claim 1, discussed previously. Uchibori et al. also disclose a compressor wherein a material of the projection is made from aluminum (col. 6, lines 40-43).

Referring to claim 5: Uchibori et al. disclose a method of plate installation comprising mounting a plate member (26) on a supporting base plate (30) by fitting a projection (31) of the supporting base plate into a through hole of the plate member to project a top end part of the projection from the through hole (col. 6, lines 45-47), the plate and projection being made from aluminum (col. 6, lines 40-43). Uchibori et al. does not disclose crushing a projected part of the projection from the through hole so as to integrate the plate member with the supporting base plate. However, Kost teaches such a feature. In discussing the connecting means for sheet metal panels, Kost teaches that an integrally formed boss can be inserted into an aperture of another panel and then flattened to create a connection (col. 1, lines 5-19). This fastening arrangement simplifies the fastening process (col. 1, lines 5-8). Therefore, a person having ordinary skill in the art could modify the boss connections disclosed by Uchibori et al. to be flattened to secure the oil plate and simplify the process of attaching the oil plate to the end plate. Additionally, Uchibori et al. and Kost do not disclose a projection with a recess on an upper face of the projection that partially remains after crushing. However, Neill teaches such a feature. However, Neill teaches such a disclosure. In discussing rivet fasteners, Neill teaches to include a recess with a conical surface on the head of the rivet (col. 3, lines 17-19, 27). The recess acts to cause a uniform flow of material throughout the rivet, improving the strength of the rivet (col. 3, lines 48-63).

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Moreover, this recess, maintained even after the pressing of the rivet, ensures that a uniform flow of material exists throughout the fastener, which improves the overall strength of the rivet (col. 3, lines 49-57). Therefore, a person having ordinary skill in the art could modify the projection disclosed by Uchibori et al. and modified by Kost to include a conical recess at the head portion that is partially retained after pressing in order to increase and maintain the strength of the projection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See accompanying form PTO-892 Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN ZOLLINGER whose telephone number is 571-270-7815. The examiner can normally be reached on Monday - Thursday, 9 a.m. - 4 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Naeem Haq can be reached on 571-272-6758. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. Z./
Examiner, Art Unit 4117

/Naeem Haq/
Supervisory Patent Examiner, Art
Unit 4117

February 17, 2009